

Case 14. Incoming Association of Class

To get Incoming Associations of a Class

1. Right-click a Class element and open the **Specification window > Traceability > Create**.
2. Set the **Name** to 'Incoming associations'.
3. Click **Create operation > Filter**.

If you cannot see the **Filter** operation under **Operations**, make sure the **Expert** mode is enabled.

4. Select **Input > Metachain Navigation**.
5. Click **Insert**.
6. Under **Metaclass or Stereotype**, select **Class**, and under **Property**, select **_associationOfEndType**.

The screenshot shows the 'Expression' window with a tree view on the left and a configuration panel on the right. The tree view shows a 'Filter' operation with 'Input = Metachain Navigation' and 'Predicate = null'. The configuration panel on the right is titled 'Filter::Input' and has buttons for 'Edit', 'Use as...', and 'Reset'. Below these is a table with two columns: 'Metaclass or Stereotype' and 'Property'. The table has one row with 'Class' and '_associationOfEndType'. There are 'Insert' and 'Remove' buttons to the right of the table. The 'Operation Name' field is set to 'Metachain Navigation'.

Metaclass or Stereotype	Property
Class	_associationOfEndType

7. Select **Predicate > Operation from Model > Equals**.

The screenshot shows the 'Expression' window with a tree view on the left and a configuration panel on the right. The tree view shows a 'Filter' operation with 'Input = Metachair' and 'Predicate = null'. The configuration panel on the right is titled 'Filter::Predicate' and has a section for 'Operations'. It shows five icons: 'Type Test', 'Property Test', 'Operation from Model', 'Script', and 'Nested Operation'. The 'Operation from Model' icon is selected.

8. Select **A > Metachain Navigation**.

The screenshot shows the 'Expression' window with a tree view on the left and a configuration panel on the right. The tree view shows a 'Filter1' operation with 'Input = Metachain Navigat', 'Predicate = Nested Opera', and 'Body = Equals1'. The configuration panel on the right is titled 'Operation from Model::A' and has a section for 'Operations'. It shows two icons: 'Simple Navigation' and 'Metachain Navigation'. The 'Metachain Navigation' icon is selected.

9. Click **Insert**.

10. Under **Metaclass or Stereotype**, select **Property**, and under **Property**, select **Type**.

Operation from Model::A

Operation Name: Metachain Navigation1

Metaclass or Stereotype	Property
Property	Type

Buttons: Edit, Use as..., Reset, Insert, Remove

11. Select **Context** > **Reset**.

Metachain Navigation::Context

Context: arg

Buttons: Edit, Use as..., Reset

12. Select **Context** > **Filter**.

Metachain Navigation::Context

Operations:

- Simple Navigation
- Metachain Navigation
- Find
- Filter

13. Select **Input** > **Simple Navigation**. Select **Member End** and set **Is Applied** to **true**, and **Direction** to **Source To Target**.

Filter::Input

Relation Criterion	Is Applied	Direction	Properties	Result Ty...
UML Properties				
Member End	<input checked="" type="checkbox"/>	Source To Target		

Buttons: Edit, Use as..., Reset

If you cannot see the **Member End** property, make sure the 'Show relations criteria available only for context' check box is not selected.

14. Select **Predicate** > **Nested Operation**.

Filter::Predicate

Operations:

- Type Test
- Property Test
- Operation from Model
- Script
- Nested Operation

15. Select **Body > Simple Navigation**. Select **isNavigable() (Port)** and set **Is Applied** to **true**, and **Direction** to **Source To Target**.

Relation Criterion	Is Applied	Direction	Properties	Result T...
UML Operations				
isNavigable() (Port)	<input checked="" type="checkbox"/> true	Source To Target		
isNavigable() (Prop...)	<input type="checkbox"/> false			
isNavigable() (Exte...)	<input type="checkbox"/> false			

16. Select **B > Contextual Variable**. Set the **Value** to **THIS**.

Operation Name: Contextual Variable1

Value: THIS

17. Click **OK**.

Sample model

The model used in these examples is the *Case Studies for Querying the Model* sample model. To open this model, you need to download [case studies for querying the model.mdzip](#).